

## CLAIMS

1. A forming tool for forming sheet blanks in a  
5 diaphragm press (1) of the kind comprising an openable,  
closed pressure chamber (4), which is divided in a gas  
and liquid tight manner by means of a flexible diaphragm  
(5), the forming tool (6) being adapted to be arranged  
on one side of the diaphragm and a sheet blank (11) to  
10 be formed being adapted to be arranged between the form-  
ing tool and the diaphragm, while the opposite side of  
the diaphragm is adapted to be pressurised by a fluid  
being supplied at high pressure to cause the flexible  
diaphragm to deform and, thus, the sheet blank to be  
15 pressed against the forming tool, the forming tool fur-  
ther comprising a cutting edge, so that the sheet blank  
is both formed into the desired shape and cut to the  
desired size in a single forming step, c h a r a c t e r -  
i s e d in that the forming tool (6) comprises an elon-  
20 gate cutting and flanging tool (7) along at least part  
of its periphery and/or around an intended opening in the  
sheet blank (11), the cutting and flanging tool having a  
cutting edge (17) and being displaceable, with the aid of  
actuating means (18), in an elongate slot in the forming  
25 tool towards and away from the diaphragm (5), in such  
manner that, at a first pressing pressure, the sheet  
blank is caused to be cut off against the cutting edge  
and, as the pressure is continuously increased, the cut-  
ting and flanging tool is caused to be displaced into the  
30 slot in the forming tool away from the diaphragm, so that  
the peripheral edge of the sheet blank and/or the circum-  
ferential edge around an opening therein is/are deformed  
towards the interior of the slot during forming of a  
flanged edge (22) in the sheet blank.
- 35 2. A forming tool as claimed in claim 1, c h a r -  
a c t e r i s e d in that the actuating means comprises

a plurality of hydraulic cylinders (18) along the longitudinal extent of the cutting and flanging tool (7).

3. A forming tool as claimed in claim 1 or 2, characterised in that the cutting edge (17)  
5 of the cutting and flanging tool (7) is formed by a recess (15) along a longitudinal edge of the cutting and flanging tool that is oriented towards a forming surface (16) of the forming tool (6), the width of the recess corresponding to the width of the flanged edge (22) to be  
10 formed.

4. A forming tool as claimed in claim 3, characterised in that the recess (15) of the cutting and flanging tool (7) has a varying width along its longitudinal extent so as to form a flanged edge (22) of  
15 varying width.

5. A forming tool as claimed in any one of the preceding claims, characterised in that, in an initial, projecting position, an outermost surface of the cutting and flanging tool (7) is flush with a forming  
20 ing surface (16) of the forming tool (6).

6. A diaphragm press comprising a forming tool (6) as claimed in any one of the preceding claims.